USDA-Natural Resources Conservation Service

Notice of Source Identified Plant Release

Indiangrass

The USDA-Natural Resources Conservation Service (NRCS), the University of Northern Iowa (UNI), the Iowa County Integrated Roadside Vegetation Management Program (IIRVMP), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of a source identified (Southern Iowa) Germplasm of indiangrass, ***Sorghastrum*** *nutans* (L.) Nash.

The indiangrass has been assigned the NRCS accession number 9062318.

Origin: Southern Iowa Counties.

Ecotype Description:

Indiangrass is a tall (four to eight feet) native warm season perennial grass which spreads by short rhizomes. Golden-yellow lance-shaped, rather dense panicles are 4-12 inches long on erect stems 4-8 feet tall. Leaves are rather stiff and straight. Prominent vertical projections are located on both sides of the sheath throat. Leaves are lighter green than those of big bluestem, a common associate. It is found in the eastern Canadian provinces and in all but six western states. It is most commonly associated with bluestem grasses; particularly in the central lowland and eastern portions of the Great Plains. This grass, which is relished by livestock, produces \excellenthay if cut before flower stalks develop. In recent years it has been seeded in mixtures with other native tall grasses in the true prairie region.

Management:

Indiangrass seeds per pound average 175,000. A seeding rate of 3.3 pounds pure live seed (PLS) per acre or 40 (PLS) per linear foot in 36 inch rows for seed production is sufficient. Rates for pasture seeding should be seven to ten PLS pounds per acre (15 to 25 bulk pounds/acre). Seed should be planted **1/4** to **1/2** inch deep in a firm relatively weed free seedbed. Seedling vigor is good and stands are comparatively easy to establish where competition is controlled. Mowing above the height of the indiangrass has been used to reduce competition when weeds begin to severely encroach into the planting.

Available chemical sprays for use in the establishment of indiangrass are limited. Post-emergence broadleaf sprays have been used during indiangrass establishment.

Seed yields are good and can be harvested with a combine. Yields of 400 pounds per acre have been commonly harvested on managed stands.

For isolation requirements, indiangrass should be spaced a minimum of 900 feet from any other different indiangrass selection.

Site Description:

Indiangrass is adapted to most upland and some bottomland soils. Ecotypes are adapted to areas with as little as 14 inches to over 50 inches of average annual precipitation. The number of collections from each zone in Southern Iowa guarantees the adaptation of releases to the entire zone.

Collections were made from the following locations (see attached) and included in the composite indiangrass, Southern Iowa origin (9062318).

Collections of indiangrass from east to west across Iowa prevent positive assessment of all pollination or chromosome characteristics. Plants are cross-pollinated and many hybrids are formed in the area of adaptation.

Climate: The average annual temperature is 48 degrees Fahrenheit. July is the warmest month with an average high of 85 degrees and low of 64 degrees. January is the coldest month with an average high of 27 degrees and low of 8 degrees. The average annual precipitation for this region is 30 inches with much of this coming during the growing season. The average frost-free growing period runs from April 30 to October 6.

Availability of Plant Materials:

Breeders material is being produced by the Plant Materials Center, Elsberry, Missouri and the University of Northern Iowa (UNI) at Cedar Falls, Iowa. Source Identified seed will be released to interested commercial seed growers.

Release Approved BY:

Roger A. Hansen — Chairman, PM Advisory Committee, NRCS
Roger A. Hansen
Missouri State Conservationist — Date: 7-27-98

Robert D. Koob — President, UNI — Date: 8-17-98

Daryl D. Smith — Program Director IRVM — Date: 8/25/98

Leroy Brown — Iowa State Conservationist — Date: 8/31/98

Robert E. Lawson — Secretary/Treasurer ICIA — Date: AUG 27 1998

Steve Holland — Representative IDOT — Date: 8-25-98

Site Descriptions of Source-Identified Seed for 1998 Iowa Ecotype Project Seed Release

IndiangrassZone 3 *(Sorghastrum nutans)*

Zone	County	SPP	Code	OBS	TNSHP	Range	SECT	Quarter Section	Year	SiteNotes:
3	Pottawattamie	Sonu	SN 3-33	223	76	38W	16-17		1993	
3	Taylor	Sonu	SN 3-45	235	67	34W	16		1993	Highway 148 South of Bedford
3	Page	Sonu	SN 3-46	236	67	37w	7		1993	Grove Cemetery
3	Monroe	Sonu	SN 3-50	240	71	18W		NW4 NE4	1993	
3	Montgomery	Sonu	SN 3-52	242	72	39w	30	N edge	1993	
3	Mahaaska	Sonu	SN 3-65	254	75	16W	14	center	1993	
3	Lucas	Sonu	SN3-66	255	73	21 W	4	sw4	1993	
3	Mahaska	Sonu	SN 3-67	256	75	17W	13	Wedge SE4	1993	
3	Warren	Sonu	SN3-68	257	74	24 W	19	SE4 NE4	1993	
3	Clarke	Sonu	SN3-71	260	73	27 W	26	center of south edge	1993	
3	Lucas	Sonu	SN3-72	261	73	21 W	2	center	1993	
3	Lucas	Sonu	SN3-73	262	73	21 W	5	center	1993	
3	Appanoose	Sonu	SN 3-79	268	70	18W	13	SE4	1993	
3	Marion	Sonu	SN3-83	271	75	21 W	12	N edge	1993	